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EXAMINER

SALL, EL HADJI MALICK

ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/928,493	<b>Applicant(s)</b> PERDON ET AL.	
	<b>Examiner</b> El Hadji M. Sall	<b>Art Unit</b> 2157	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 14-33, 35-44 and 46-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14-33, 35-44 and 46-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This action is responsive to the amendment filed on March 20, 2006. Claims 1-12, 14-33, 35-44 and 46-57 are pending. Claims 1-12, 14-33, 35-44 and 46-57 represent predicting the activities of an individual or group using minimal information.

2. ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-12, 14-33, 35-44 and 46-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz U.S. 6,029,195 in view of Rooney U.S. 6,819,669.

Herz teaches the invention substantially as claimed including system for customized electronic identification of desirable objects.

As to claim 1, Herz teaches a method of predicting the behavior of a current user of an interactive service, comprising the steps of:

Identifying each activity in which the current user participates while engaged with the interactive service, and conditions surrounding each such activity (column 32, lines 32-39; column 1, lines 17-21; see abstract);

Accessing a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities (column 3, lines 39; column 6, lines 22-25, the activities including viewing interactive television programming (column 90, lines 10-22);

Comparing (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween (column 7, lines 9-18); and

Attributing to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior (column 48, lines 49-57).

Herz fails to teach explicitly a set top box.

However, Rooney teaches a set top box (column 3, lines 64-66).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Herz in view of Rooney to incorporate a set top box. One would be motivated to do so to allow the user to interact with the programs shown on the television set (column 3, lines 65-66).

As to claim 2, Herz teaches the method of claim 1, wherein the step of identifying the conditions surrounding each of the current user's activities includes determining the amount of time that the current user participates in each activity (column 4, lines 39-43, Herz discloses which system enables a user to access target objects of relevance and interest to the user without requiring the user to expend an excessive amount of time and energy)

As to claim 3, Herz teaches the method of claim 2, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity (column 32, lines 32-39; abstract).

As to claims 4 and 5, Herz teaches the method of claims 3 and 1, wherein the first collection of data is based on the other users' activities while engaged with the interactive service (column 3, lines 35-45).

As to claim 6, Herz teaches method of claim 1, wherein the other users are unrelated individual persons (column 30, lines 47-49).

As to claim 7, Herz teaches the method of claim 1, wherein the other users are members of a group and the current user is identifiable as a potential member of that group (column 48, lines 45-49).

As to claim 8, Herz teaches the method of claim 1, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity (column 32, lines 32-39; abstract).

As to claim 9, Herz teaches the method of claim 1, further comprising the step of: periodically updating the first collection of data to reflect the other users' ongoing participation in additional activities (column 5, lines 28-30).

As to claim 10, Herz teaches the method of claim 9, wherein the step of periodically updating occurs in real time, during the current user's engagement with the interactive service (column 5, lines 28-30).

As to claim 11, Herz teaches the method of claim 1, further comprising the step of:

accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive television service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality (column 34, lines 33-45; column 90, lines 10-22); and

wherein the step of attributing includes selecting one or more activities, from the plurality of available activities, in which the current user is most likely to participate during the engagement with the interactive television service (column 90, lines 10-22; abstract).

As to claim 12, Herz teaches the method of claim 1, wherein the interactive television service is accessed through the Internet, the current user's activities and the other users' activities include visits to Internet web sites, and the first collection of data includes data reflecting (i) the identity of each other user (column 1, lines 40-42; abstract), (ii) the types of Internet web sites that each other user has visited (column 7, lines 30-35), (iii) the content of each type of Internet web site visited by each other user (column 32, lines 32-39), and (iv) the amount of time spent at each type of Internet web site by each other user (column 33-34, lines 65-67 to 1-3).

As to claim 14, Herz teaches the method of claim 12, further comprising the step of:

periodically updating the first collection of data to reflect the other users' visits to additional Internet web sites (column 5, lines 28-30).

As to claim 15, Herz teaches the method of claim 14, wherein the step of periodically updating occurs in real time, during the current user's engagement with the service (column 5, lines 28-30).

As to claim 16, Herz teaches the method of claim 12, further comprising the step of:

accessing a second collection of data that reflects (i) a plurality of types of Internet web sites that are available for the current user to visit and (ii) information about each type of web site within such plurality that distinguishes it from the other types of web sites within such plurality (column 7, lines 30-47); and

wherein the step of attributing includes selecting one or more types of web sites, from the plurality of types of web sites, which the current user is most likely to visit during the engagement with the service (column 87, lines 46-53).

As to claim 17, Herz teaches a method of predicting the behavior of a user of an interactive television service, during a particular period of engagement with the interactive television service, comprising:

identifying activities in which the user participates during the period of engagement, and conditions surrounding each such activity (column 32, lines 32-39; see abstract);



identifying the activities of multiple other contemporaneous users of the interactive service during the same period of engagement, and conditions surrounding such activities (column 32, lines 32-39), the activities including viewing interactive television programming (column 90, lines 10-22);

maintaining a first collection of data that includes data reflecting both the user's and the other contemporaneous users' cumulative activities identified during the period of engagement, and conditions surrounding such cumulative activities (column 3, lines 35-45, Herz discloses a number of other research groups have looked at the automatic generation and labeling of clusters of articles for the purpose of browsing through the articles);

determining, from such first collection of data, patterns of behavior exhibited by such user's and the other contemporaneous users' participation in activities during the period of engagement (column 7, lines 19-51);

incorporating, into the first collection of data, data reflecting such determined patterns of behavior (column 27, lines 1-6, Herz discloses it should be trained to take the attributes of a target object as input, and produce as output a unique pattern that can be used to identify the appropriate low-level cluster. For maximum accuracy, low-level clusters that are similar to each other (close together in the cluster tree) should be given similar identifying patterns);

comparing (i) the user's present activities and surrounding conditions and (ii) the cumulative activities and surrounding conditions as reflected in such first collection of data, to identify similarities therebetween (column 7, lines 9-18);

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attributing to the user a pattern of future behavior based on such similarities and on the previously determined patterns of behavior (column 48, lines 49-57).

Herz fails to teach explicitly a set top box.

However, Rooney teaches a set top box (column 3, lines 64-66).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Herz in view of Rooney to incorporate a set top box. One would be motivated to do so to allow the user to interact with the programs shown on the television set (column 3, lines 65-66).

As to claim 18, Herz teaches the method of claim 17, further comprising the step of:

continually updating the first collection of data, to reflect (i) the user's and the other contemporaneous users' participation in additional activities and (ii) the determination of new patterns of behavior based on such participation in additional activities (column 5, lines 28-30, Herz discloses users' target profile interest summaries are automatically updated on a continuing basis to reflect each user's changing interests); and

wherein the steps of comparing and attributing are performed, at any given point in time, in conjunction with the updated first collection of data (column 17-18, lines 60-67 to lines 1-8)

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As to claim 19, Herz discloses the method of claim 18, further comprising the step of:

accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality (column 34, lines 33-45; column 90, lines 10-22); and

wherein the step of attributing includes selecting one or more activities, from the plurality of available activities, in which the current user is most likely to participate during the period of engagement with the interactive service (column 90, lines 10-22; abstract).

As to claim 20, Herz teaches the method of claim 18, wherein the interactive service is accessed through the Internet, the user's and other contemporaneous users' activities comprise visits to Internet web sites, and the first collection of data includes data reflecting (i) the types of Internet web sites that the user and the other contemporaneous users have visited (column 7, lines 30-35), (ii) the content of each type of Internet web site visited (column 32, lines 32-39), (iii) the amount of time spent at each type of Internet web site visited (column 33-34, lines 65-67 to 1-3).

As to claim 21, Herz teaches the method of claim 20, further comprising the step of:

accessing a second collection of data that reflects (i) a plurality of types of Internet web sites that are available for the user to visit and (ii) information about each type of web site within such plurality that distinguishes it from the other types of web sites within such plurality (column 7, lines 30-47); and

wherein the step of attributing includes selecting one or more types of web sites, from the plurality of types of web sites, which the current user is most likely to visit during the engagement with the service (column 87, lines 46-53).

As to claim 22, Herz teaches a method of delivering targeted informational content to a current user of an interactive television service, comprising:

identifying each activity in which the current user participates while engaged with the interactive service, and conditions surrounding each such activity (column 32, lines 32-39; column 1, lines 17-21; abstract);

accessing a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) preferences exhibited by such other users through their participation in such cumulative activities (column 3, lines 39; column 6, lines 22-25), the activities including viewing interactive television programming (column 90, lines 10-22);

comparing (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween (column 7, lines 9-18);

attributing to the current user a preference profile based on such similarities and on the other users' preferences (column 48, lines 49-57); and

generating an ordered list of informational content to be selectively delivered to the current user based on the preference profile (column 3, lines 1-3; abstract).

Herz fails to teach explicitly a set top box.

However, Rooney teaches a set top box (column 3, lines 64-66).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Herz in view of Rooney to incorporate a set top box. One would be motivated to do so to allow the user to interact with the programs shown on the television set (column 3, lines 65-66).

As to claim 23, Herz teaches the method of claim 22, wherein the step of identifying the conditions surrounding each of the current user's activities includes determining the amount of time that the current user participates in each activity (column 33-34, lines 65-67 to 1-3).

As to claim 24, Herz teaches the method of claim 22, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity (column 33-34, lines 65-67 to 1-3; abstract).

As to claims 25 and 26, Herz teaches the method of claims 24 and 22, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service (column 3, lines 35-45, Herz discloses a number of other research groups have looked at the automatic generation and labeling of clusters of articles for the purpose of browsing through the articles; column 90, lines 10-22).

As to claim 27, Herz teaches the method of claim 22, wherein the other users are unrelated individual persons (column 10, lines 17-18, Herz discloses the user is an employee and the target objects are classifieds for potential employers; column 30, lines 47-49, Herz discloses a group of users who have been previously interacting on-line with another user).

As to claim 28, Herz teaches the method of claim 22, wherein the other users are members of a group and the current user is identifiable as a potential member of that group (column 48, lines 45-49).

As to claim 29, Herz teaches the method of claim 22, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity (column 32, lines 32-39; column 33-34, lines 65-67 to 1-3; abstract).

As to claim 30, Herz teaches the method of claim 22, further comprising the step of:

periodically updating the first collection of data to reflect the other users' ongoing participation in additional activities (column 5, lines 28-30).

As to claim 31, Herz teaches the method of claim 30, wherein the step of periodically updating occurs in real time, during the current user's engagement with the interactive television service (column 5, lines 28-30; column 90, lines 10-22).

As to claim 32, Herz teaches the method of claim 22, further comprising the step of:

accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive television service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality (column 34, lines 33-45); and

wherein the step of attributing a preference profile is based in part on those activities, from the plurality of available activities, in which the current user is most likely to participate during the engagement with the interactive television service (column 87, lines 46-53; abstract).

As to claim 33, Herz teaches the method of claim 22, wherein the interactive television service is accessed through the Internet, the current user's activities and the other users' activities include visits to Internet web sites, and the first collection of data includes data reflecting (i) the identity of each other user, (ii) the types of Internet web sites that each other user has visited, (iii) the content of each type of Internet web site visited by each other user, and (iv) the amount of time spent at each type of Internet web site by each other user (column 77, lines 19-23 column 7, lines 30-35; column 32, lines 32-39; column 33-34, lines 65-67 to 1-3).

As to claim 35, Herz teaches a computer-readable medium having stored thereon instructions for predicting the behavior of a current user of an interactive television service which, when executed by a processor, cause the processor to perform the steps of:

identifying each activity in which the current user participates while engaged with the interactive service, and conditions surrounding each such activity (column 1, lines 17-21; column 32, lines 32-39; abstract);

accessing a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities (column 3, lines 39; column 6, lines 22-25), the activities including viewing interactive television programming (column 90, lines 10-22);



comparing (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween (column 7, lines 9-18); and

attributing to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior (column 48, lines 49-57).

Herz fails to teach explicitly a set top box.

However, Rooney teaches a set top box (column 3, lines 64-66).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Herz in view of Rooney to incorporate a set top box. One would be motivated to do so to allow the user to interact with the programs shown on the television set (column 3, lines 65-66).

As to claim 36, Herz teaches the computer-readable medium of claim 35, wherein the instruction that causes the processor to perform the step of identifying the conditions surrounding each of the current user's activities causes the processor to perform the step of determining the amount of time that the current user participates in each activity (column 32, lines 32-39; abstract).

As to claim 37, Herz teaches the computer-readable medium of claim 36, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of

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time that each other user participated in each activity (column 32, lines 32-39; abstract).

As to claim 38, Herz teaches the computer-readable medium of claim 37, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service (column 3, lines 35-45; column 90, lines 10-22).

As to claim 39, Herz teaches the computer-readable medium of claim 35, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service (column 3, lines 35-45; column 90, lines 10-22).

As to claim 40, Herz teaches the computer-readable medium of claim 35, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity (column 32, lines 32-39; column 33-34, lines 65-67 to 1-3; abstract).

As to claim 41, Herz teaches the computer-readable medium of claim 1, having stored thereon further instructions which, when executed by the processor, cause the processor to perform the step of: periodically updating the first collection of data to reflect the other users' ongoing participation in additional activities (column 5, lines 28-30).

As to claim 42, Herz teaches the computer-readable medium of claim 41, wherein the instructions that cause the processor to perform the step of periodically updating cause it to do so in real time, during the current user's engagement with the interactive television service (column 5, lines 28-30; column 90, lines 10-22).

As to claim 43, Herz teaches the computer-readable medium of claim 35, having stored thereon further instructions which, when executed by the processor, cause the processor to perform the step of:

accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality (column 34, lines 33-45); and

wherein the step of attributing includes selecting one or more activities, from the plurality of available activities, in which the current user is most likely to participate during the engagement with the interactive service (column 90, lines 10-22; abstract).

As to claim 44, Herz teaches the computer-readable medium of claim 35, wherein the interactive service is accessed through the Internet, the current user's activities and the other users' activities comprise visits to Internet web sites, and the first collection of data includes data reflecting (i) the identity of each other user, (ii) the

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types of Internet web sites that each other user has visited, (iii) the content of each type of Internet web site visited by each other user, and (iv) the amount of time spent at each type of Internet web site by each other user (column 77, lines 19-23; column 7, lines 30-35; column 32, lines 32-39; column 33-34, lines 65-67 to 1-3; column 90, lines 10-22).

As to claim 46, Herz teaches Apparatus for predicting the behavior of a current user of an interactive television service, comprising:

means for identifying each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity (column 1, lines 17-21; column 32, lines 32-39; column 90, lines 10-22);

means for accessing a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities (column 3, lines 39; column 6, lines 22-25; column 90, lines 10-22);

means for comparing (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween (column 7, lines 9-18);

means for attributing to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior (column 48, lines 49-57);  
and

Herz fails to teach explicitly a set top box.

However, Rooney teaches a set top box (figure 1, item 104; column 3, lines 64-66).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Herz in view of Rooney to incorporate a set top box and a set top box including a content delivery service and a user monitor, the set top box enabling communication between the current user and a head end, the user monitor including the means for identifying, the means for accessing, the means for comparing, and the means for attributing. One would be motivated to do so to allow the user to interact with the programs shown on the television set (column 3, lines 65-66).

As to claim 47, Herz teaches the apparatus of claim 46, wherein the means of identifying the conditions surrounding each of the current user's activities includes means for determining the amount of time that the current user participates in each activity (column 4, lines 39-43)

As to claim 48, Herz teaches the apparatus of claim 47, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity (column 32, lines 32-39; abstract).

As to claims 49 and 50, Herz teaches the apparatus of claims 48 and 46, wherein the first collection of data is based on the other users' activities while engaged with the interactive television service (column 3, lines 35-45; column 90, lines 10-22).

As to claim 51, Herz teaches the apparatus of claim 46, wherein the other users are unrelated individual persons (column 10, lines 17-18; column 30, lines 47-49, Herz discloses a group of users who have been previously interacting on-line with another user).

As to claim 52, Herz teaches the apparatus of claim 46, wherein the other users are members of a group and the current user is identifiable as a potential member of that group (column 10, lines 17-18).

As to claim 53, Herz teaches the apparatus of claim 46, wherein the first collection of data includes data reflecting (i) the identity of each other user, (ii) each activity in which each other user has participated and (iii) the amount of time that each other user participated in each activity (column 32, lines 32-39; column 33-34, lines 65-67 to 1-3; column 4, lines 39-43).

As to claim 54, Herz teaches the apparatus of claim 46, further comprising: means for periodically updating the first collection of data to reflect the other users' ongoing participation in additional activities (column 5, lines 28-30).

As to claim 55, Herz teaches the apparatus of claim 54, wherein the means for periodically updating operates in real time, during the current user's engagement with the interactive television service (column 5, lines 28-30; column 90, lines 10-22).

As to claim 56, Herz teaches the apparatus of claim 46, further comprising:  
means for accessing a second collection of data that reflects (i) a plurality of activities that are available via the interactive service and (ii) information about each activity within such plurality of available activities that distinguishes it from the other activities within such plurality (column 34, lines 33-45; column 90, lines 10-22); and

wherein the means for attributing includes means for selecting one or more activities, from the plurality of available activities, in which the current user is most likely to participate during the engagement with the interactive service (column 90, lines 10-22; abstract).

As to claim 57, Herz teaches the apparatus of claim 46, wherein the interactive service is accessed through the Internet, the current user's activities and the other users' activities comprise visits to Internet web sites, and the first collection of data includes data reflecting (i) the identity of each other user, (ii) the types of Internet web sites that each other user has visited, (iii) the content of each type of Internet web site visited by each other user, and (iv) the amount of time spent at each type of Internet

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web site by each other user (column 77, lines 19-23; column 7, lines 30-35; column 32, lines 32-39; column 33-34, lines 65-67 to 1-3; abstract).

**4. Response to Arguments**

Applicant's arguments filed 03/20/06 have been fully considered but they are not persuasive.

(A) Applicant argues that The Herz and Rooney references alone or in any permissible combination fail to teach or suggest Applicants' invention as a whole. Furthermore, Applicant argues that Herz fails to disclose the claimed accessing, by a set top box, a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participating in such cumulative activities, the activities including viewing interactive television programming.

In regards to the above point, examiner respectfully disagrees.

Column 3, lines 39; column 6, lines 22-25 and column 90, lines 10-22, Herz teaches all the limitation of Applicant's claimed invention including browsing large article collections, The target objects may be published articles, purchasable items, or even other people, and their properties are stored, and/or represented and/or denoted on the electronic media as (digital) data, and the activities of viewing interactive television programming (column 90, lines 10-22).



In column 3, lines 64-66, Rooney teaches a set top box.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Herz in view of Rooney to incorporate a set top box. One would be motivated to do so to allow the user to interact with the programs shown on the television set (column 3, lines 65-66).

In addition to the Applicant's argument that In response to applicant's argument that there the Herz and Rooney references alone or in any permissible combination fail to teach or suggest Applicants' invention as a whole, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, One would be motivated to do so to allow the user to interact with the programs shown on the television set (column 3, lines 65-66).

(B) Applicant argues that in addition Herz fails to disclose the claimed comparing (i) the current users' identified activities and surrounding conditions and (ii) the other uses' cumulative activities and surrounding conditions, to Identify similarities therebetetween.

In regards to the above point, examiner respectfully disagrees.

Column 7, lines 9-47, Herz discloses The system further includes a profile processing module which estimates each user's interest in various target objects by reference to the users' target profile interest summaries, for example by comparing the target profiles of these target objects against the search profiles in users' search profile sets, and generates for each user a customized rank-ordered listing of target objects most likely to be of interest to that user. Each user's target profile interest summary is automatically updated on a continuing basis to reflect the user's changing interests. Furthermore, users who exhibit an interest in certain World Wide Web sites also exhibit an interest in certain products, the system can match the products with the sites and thereby recommend to the marketers of those products that they place advertisements at those sites, e.g., in the form of hypertext links to their own sites.

**5. Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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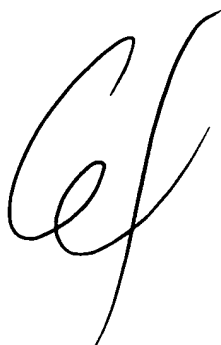
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to El Hadji M Sall whose telephone number is 571-272-4010. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

El Hadji Sall  
Patent Examiner  
Art Unit: 2157



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